



Australian Bureau of Statistics

6220.0 - Persons Not in the Labour Force, Australia, Sep 2006

Previous ISSUE Released at 11:30 AM (CANBERRA TIME) 27/03/2007

Summary

Main Features

Note: 30 April 2007

This release corrects and expands on supporting information such as titles, footnotes, population labels and explanatory notes to aid users in the interpretation of data. The table 'Main reason not working due to caring for children' has been included as a separate data cube in this release (previously Table 4 in Data cube 3). The relative standard errors have been amended in a number of tables to reflect state/territory, rather than national level standard errors.

NOTES

ABOUT THIS PUBLICATION

This publication presents information about people aged 15 years and over who are not in the labour force: that is, neither employed nor unemployed. The data measure the potential supply of labour not reflected in employment and unemployment statistics.

Statistics in this publication were obtained from the Persons Not in the Labour Force Survey, conducted throughout Australia in September 2006 as a supplement to the Australian Bureau of Statistics (ABS) monthly Labour Force Survey (LFS).

This survey provides information about people aged 15 years and over who were not in the labour force. The survey collected details about whether they wanted to work, reasons why they were not actively looking for work, their availability for work, and their main activity while not in the labour force.

Many people not in the labour force could be considered to have some attachment to the labour force. For example they may want a job, but for a variety of reasons are not actively looking for work or are not currently available to start a job. There is an expectation that many of these people will move into the labour force in the short term, or could do so if labour market conditions changed.

NOTES ABOUT THE ESTIMATES

From 2006, occupation data are classified according to the **ANZSCO-Australian and New Zealand Standard Classification of Occupations, First Edition, 2006** (cat. no. 1220.0). The new classification replaces the **ASCO-Australian Standard Classification of Occupations, Second Edition, 1997** (cat. no. 1220.0).

ROUNDING

As estimates have been rounded, discrepancies may occur between sums of the component items and totals.

INQUIRIES

For further information about these and related statistics, contact the National Information and Referral Service on 1300 135 070 or Labour Market Section on Canberra (02) 6252 7206.

Conceptual framework

CONCEPTUAL FRAMEWORK

PERSONS NOT IN THE LABOUR FORCE AGED 15 YEARS AND OVER

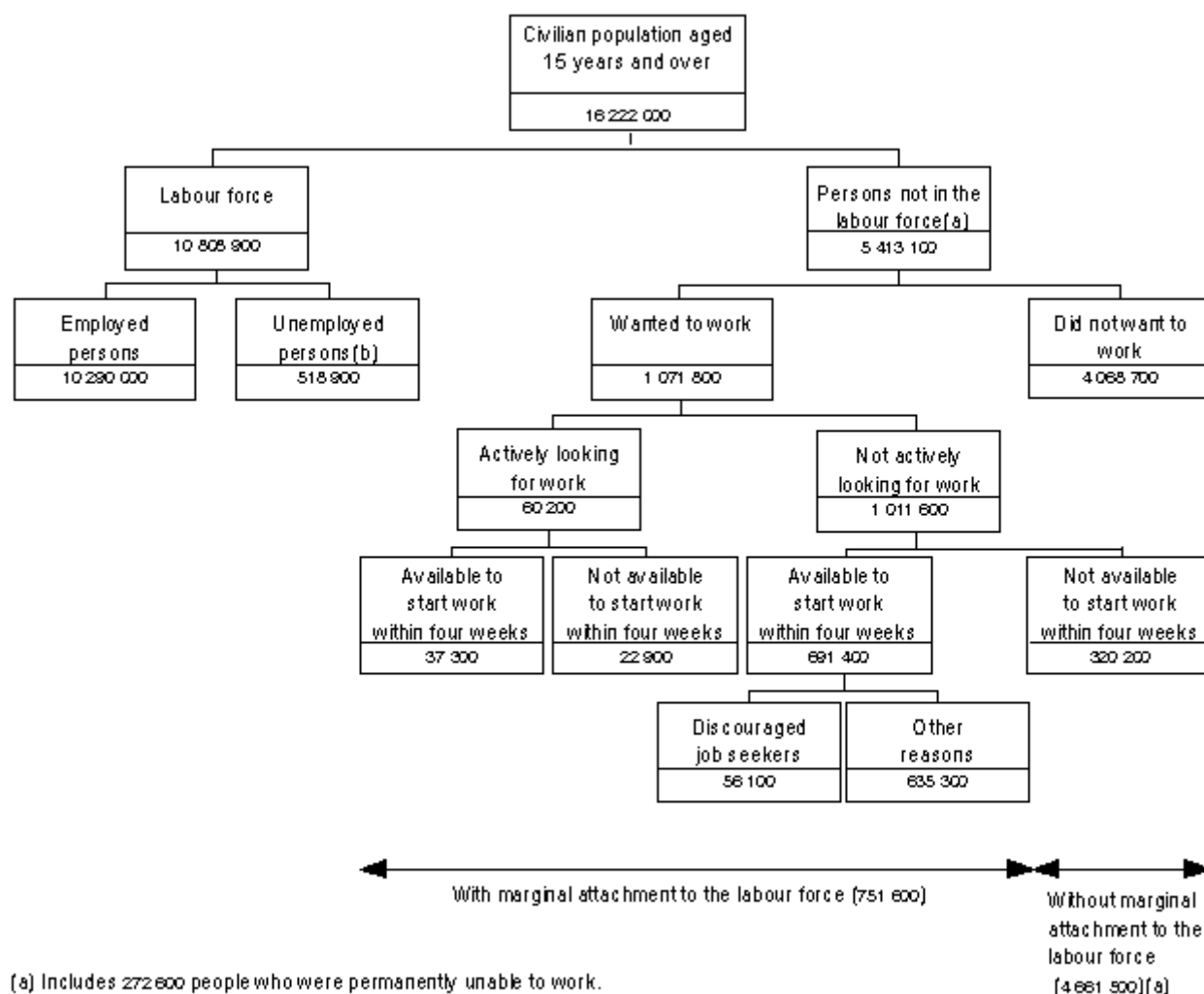
Persons not in the labour force can be divided into those who are marginally attached to the labour force, and those who are not. Persons who are marginally attached to the labour force may satisfy some, but not all, of the criteria required to be classified as unemployed.

Persons not in the labour force are considered to be marginally attached to the labour force if they:

- want to work and are actively looking for work but are not available to start work in the reference week, or
- want to work and are not actively looking for work but are available to start work within four weeks.

Persons not in the labour force are not marginally attached to the labour force if they:

- do not want to work, or
- want to work but are not actively looking for work and are not available to start work within four weeks.



(a) Includes 272 600 people who were permanently unable to work.
(b) Includes future starters.

Summary of Findings

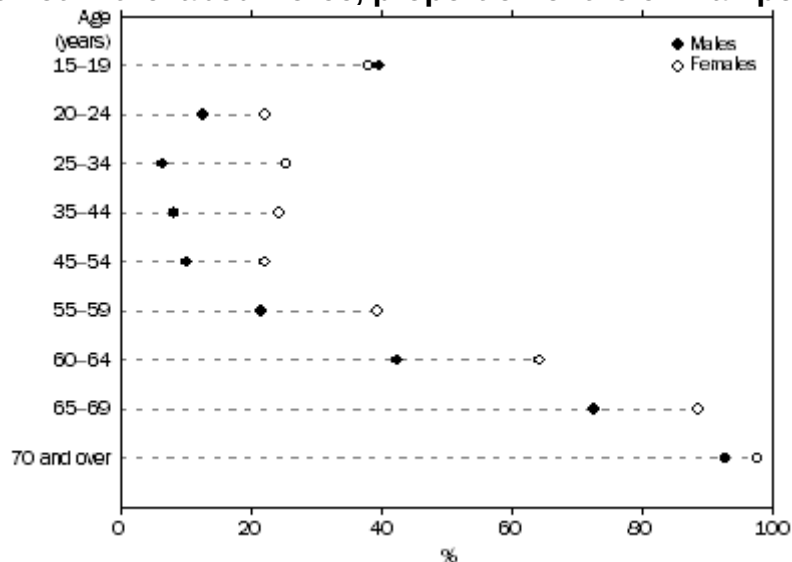
SUMMARY OF FINDINGS

OVERVIEW

In September 2006, there were 5,413,100 people aged 15 years and over who were not in the labour force. This represented 33% of the civilian population aged 15 years and over. One-fifth (20%) of persons not in the labour force wanted to work and 61% of persons not in the labour force were women.

The proportion of people who were not in the labour force varied according to age. In the 15-19 years age group, where there are high levels of participation in education, the proportion was 40% for men and 38% for women. In all other age groups, there was a higher proportion of women than men not in the labour force. The proportion of men not in the labour force was lower for those aged 25-34 years (6.5%) than for those aged 45-54 years (10%), 55-59 years (22%), 60-64 years (43%) and 70 years and over (93%). The proportion of women not in the labour force was lower for those aged 45-54 years (22%) than for those aged 25-34 years (26%) and higher for those aged 55-59 years (39%), 60-64 years (64%) and 70 years and over (98%).

Persons not in the labour force, proportion of the civilian population



MARGINAL ATTACHMENT

Of the 751,600 people with marginal attachment to the labour force in September 2006, 691,400 or 92% were not actively looking for work but were available to start work within four weeks. The remainder were actively looking for work but were not available to start work in the reference week.

Some 15% of women and 12% of men not in the labour force were marginally attached to the labour force. Of women with marginal attachment to the labour force, 70% would have preferred part-time work, while 16% preferred full-time work. For men, 51% preferred part-time work and 35% preferred full-time work. The remainder had no preference, or were undecided.

Approximately 59% of people with marginal attachment to the labour force 'intended to enter' the labour force within 12 months, 19% 'might enter' the labour force within 12 months, and 18% 'did not intend to enter' the labour force within 12 months.

Of those with marginal attachment to the labour force, 79% previously had a job. Of those who previously had a job, 33% stated that their last job was less than 12 months ago, and 21% reported their last job was between 1 year and 3 years ago.

For people with marginal attachment to the labour force the most common main activities since last job were 'home duties or caring for children' (16% of men, 62% of women) and 'attending an educational institution' (40% of men, 21% of women).

Main reason for not actively looking for work

The main reasons for not actively looking for work most commonly reported by men were 'attending an educational institution' (33%) and 'own ill health or physical disability' (20%). The most commonly reported main reasons for not actively looking for work for women were

'caring for children' (28%) and 'attending an educational institution' (17%).

Discouraged job seekers

At September 2006 there were 56,100 discouraged job seekers aged 15 years and over. This is an 11% decline in the number of discouraged job seekers aged 15 years and over from September 2005 (63,100). The number of men who were discouraged job seekers declined by 18% from 2005 to 2006, whereas for women the decline was 6.3%.

Some of the characteristics of discouraged job seekers aged 15 years and over in September 2006 included:

- 64% were women
- 39% of men and 15% of women had looked for work in the previous 12 weeks
- 74% of men and 56% of women intended to enter the labour force in the next 12 months
- 82% had worked before
- 30% of men and 16% of women had worked in the last 12 months.

The main reasons most commonly reported by discouraged job seekers for not actively looking for work were 'considered too old by employers' (37%), 'no jobs in locality or line of work' (27%) and 'lacked necessary training, skills or experience' (21%). 'Considered too old by employers' was reported as the main reason by 43% of men compared with 33% of women. For women, 28% reported the main reason as 'no jobs in locality or line of work' and 24% as 'lacked necessary schooling, training, skills or experience'.

PEOPLE WITHOUT MARGINAL ATTACHMENT

Of the 4,661,500 people aged 15 years and over who were without marginal attachment to the labour force in September 2006, the majority (87%) were people who did not want to work, while a further 5.8% were permanently unable to work. Of those people who did not want to work, 40% (33% of women, 51% of men) reported their main activity as 'retired or voluntarily inactive', 28% (40% of women, 7.5% of men) as 'home duties or caring for children', and 12% (10% of women, 15% of men) as 'attending an educational institution'.

There were 320,200 people who wanted to work but were neither actively looking for work nor available to start work within four weeks. Of these, 67% were women, 29% had a job less than 12 months ago, 45% reported their main activity as 'home duties or caring for children' and 27% as 'attending an educational institution'.

About this Release

Persons who were not in the labour force are classified by whether they wanted to work, whether looked for work in the last 12 months, reasons for not actively looking for work, main activity, time since last job and details of that job. Characteristics of persons with marginal attachment to the labour force and discouraged jobseekers are provided. Estimates can be cross-classified by labour force demographics such as state, sex, marital

status and birthplace.

Data for September 1994 and September 1995 are available as a standard data service (6220.0.40.001).

Explanatory Notes

Glossary

GLOSSARY

Actively looking for work

People who were taking active steps to find work. Active steps comprise:

- registering with a Job Network employment agency
- contacting an employment agency
- contacting prospective employers
- answering a newspaper advertisement for a job
- checking Centrelink touch screens
- checking factory noticeboards
- advertising or tendering for work
- contacting friends or relatives.

Age of youngest child

Age of the youngest child under 13 years old in the household.

Available to start work within four weeks

People who were available to start work within four weeks or, for people with children aged 12 years and under, could start work within four weeks if suitable child care was available.

Did not want to work

People who were not classified as employed or unemployed who:

- answered 'no' when asked if they would like a job; or
- were aged 65 years and over and said that they were 'permanently not intending to work'.

Discouraged job seekers

People with marginal attachment to the labour force who wanted to work and were available to start work within the next four weeks but whose main reason for not actively looking for work was that they believed they would not find a job for any of the following reasons:

- considered to be too young by employers
- considered to be too old by employers
- lacked necessary schooling, training, skills or experience
- difficulties because of language or ethnic background
- no jobs in their locality or line of work
- no jobs at all.

Employed

People who, during the reference week:

- worked for one hour or more for pay, profit, commission or payment in kind in a job or business, or on a farm (comprising employees, employers and own account workers); or
- worked for one hour or more without pay in a family business or on a farm (i.e. contributing family workers); or
- were employees who had a job but were not at work and were:
 - away from work for less than four weeks up to the end of the reference week; or
 - away from work for more than four weeks up to the end of the reference week and received pay for some or all of the four week period to the end of the reference week; or
 - away from work as a standard work or shift arrangement; or
 - on strike or locked out; or
 - on workers' compensation and expected to return to their job; or
- were employers or own account workers who had a job, business or farm, but were not at work.

Family

Two or more people, one of whom is at least 15 years of age, who are related by blood, marriage (registered or de facto), adoption, step or fostering; and who are usually resident in the same household. The basis of a family is formed by identifying the presence of a couple relationship, lone parent-child relationship or other blood relationship. Some households will, therefore, contain more than one family.

Family reasons for not actively looking for work

Includes ill health of a family member, caring for children and other family considerations.

Full-time or part-time preference

A person's perception of whether they would prefer to work full-time or part-time when/if they go to work, regardless of whether they are able to start work.

Full-time status in last job

Worked 35 or more hours a week in last job.

Future starters

People waiting to start, within four weeks of the end of the reference week, a new job that they have already obtained (and could have started in the reference week if the job had been available then). Under International Labour Organisation (ILO) guidelines these persons do not have to be actively looking for work to be classified as unemployed.

Had a job to go to

Includes people who had a job but, up to the end of the reference week, had been away from work without pay for four weeks or longer and had not been actively looking for work.

Intention to enter the labour force in the next 12 months

A person's intention to work or look for work in the 12 months following the interview.

Job

Any employment, full-time or part-time, lasting two weeks or more.

Job leavers

People who voluntarily ceased their last job.

Job losers

People who involuntarily ceased their last job.

Labour force

The civilian population can be split into two mutually exclusive groups: the labour force (employed and unemployed people) and persons not in the labour force.

Main activity when not in the labour force

The main activity of people who are not in the labour force since they last worked or looked for work (or in the last year if they haven't worked in that time).

Marginal attachment to the labour force

People who were not in the labour force in the reference week, wanted to work and:

- were actively looking for work but did not meet the availability criteria to be classified as unemployed; or
- were not actively looking for work but were available to start work within four weeks (footnote 1).

The criteria for determining those in the labour force are based on activity (i.e. working or looking for work) and availability to start work during the reference week. The criteria associated with marginal attachment to the labour force, in particular the concepts of wanting to work and reasons for not actively looking for work, are more subjective. Hence, the measurement against these criteria is affected by the respondent's own interpretation of the concepts used. An individual respondent's interpretation may be affected by their work aspirations, as well as family, economic and other commitments.

Main English-speaking countries

The list of main English-speaking countries provided here in this publication is not an attempt to classify countries on the basis of whether or not English is the predominant or official language of each country. It is a list of the main countries from which Australia receives, or has received, significant numbers of overseas settlers who are likely to speak English. The list therefore includes South Africa. Although large numbers of South Africans do not speak English as their first language, those who migrate to Australia are likely to speak English. The list does not include country units which are statistically insignificant in the Australian context, although they are English speaking countries.

The set of main English-speaking countries used by the ABS consists of:

- Australia
- Canada
- Ireland, Republic of
- New Zealand
- South Africa
- United Kingdom
 - England
 - Scotland
 - Wales
 - Northern Ireland
- United States of America.

Occupation in last job

All occurrences of occupation in this publication refer to Major Group as defined by **ANZSCO-Australian and New Zealand Standard Classification of Occupations, First Edition, 2006** (cat. no. 1220.0). Includes persons who have had a job less than 20 years ago only. See paragraphs 19 to 21 of the [Explanatory Notes](#) for more information.

Part-time status in last job

Worked less than 35 hours a week in last job.

Permanently not intending to work

People who said that they were permanently not intending to work.

Personal reasons for not actively looking for work

Includes own ill health or physical disability, pregnancy, attending an educational institution, had no need to work, welfare payments or pension may be affected, moved house or on holidays.

Persons in the labour force

People who were classified as being in the labour force, that is, either employed or unemployed.

Persons not in the labour force

People who were not in the categories 'employed' or 'unemployed' as defined.

Persons not in the labour force because they were caring for children

People who wanted to work and:

- were not actively looking for work because they were caring for children, but were available to start work within four weeks; or
- were not actively looking for work and reported that they were not available to start work within four weeks because they were caring for children.

Reference week

The week preceding the week in which the interview was conducted.

Status in employment in last job

People who were employed classified by whether they were employees, employers, own account workers or contributing family workers in their last job.

Time since last job

The elapsed time since ceasing last job.

Unemployed

People aged 15 years and over who were not employed during the reference week, and:

- had actively looked for full-time or part-time work at any time in the four weeks up to the end of the reference week and were available for work in the reference week; or
- were waiting to start a new job within four weeks from the end of the reference week and could have started in the reference week if the job had been available then.

Wanted to work

People who were not classified as employed or unemployed and who answered 'yes' or 'maybe' when asked if they would like a job.

See 'Available to start work within four weeks' in Glossary. [<back](#)

Abbreviations

ABBREVIATIONS

The following symbols and abbreviations are used in this publication:

ABS	Australian Bureau of Statistics
ANZSCO	Australian and New Zealand Standard Classification of Occupations
ASCO	Australian Standard Classification of Occupations
CAI	computer assisted interviewing
ILO	International Labour Organization
LFS	Labour Force Survey
RSE	relative standard error
SACC	Standard Australian Classification of Countries
SE	standard error

Populations and data items list (Appendix 1)

APPENDIX 1 POPULATIONS AND DATA ITEMS LIST

DATA AVAILABLE ON REQUEST

The ABS has a range of data available on request from the Persons Not in the Labour Force Survey. This section lists the data items and populations which relate to the survey. More detailed breakdowns of some data items are available on request.

The population(s) for a particular data item refers to the people in the survey to whom the data relates.

For more information about the ABS data available on request, contact Kerry O'Brien on Canberra (02) 6252 5242, or by facsimile on (02) 6252 7512, or by email to [<kerry.obrien@abs.gov.au>](mailto:kerry.obrien@abs.gov.au).

Population 1

Persons not in the labour force

Population 2

Persons not in the labour force who wanted to work

Population 3

Persons not in the labour force with marginal attachment to the labour force

Population 4

Persons not in the labour force who wanted to work but were not actively looking for work and were available to start work within four weeks

Population 5

Persons not in the labour force who were discouraged job seekers

Population 6

Persons not in the labour force who wanted to work but were not actively looking for work and were not available to start work within four weeks

Population 7

Persons not in the labour force because they were caring for children, who wanted to work but were not actively looking for work

Population 8

Persons not in the labour force who previously had a job

Population 9

Persons not in the labour force without marginal attachment to the labour force

Population 10

Persons not in the labour force whose last job was less than 20 years ago

Data items		Populations
1	State or territory of usual residence	All
	New South Wales	
	Victoria	
	Queensland	
	South Australia	
	Western Australia	
	Tasmania	
	Northern Territory	
	Australian Capital Territory	
2	Area of usual residence	All

	State capital city	
	Balance of state/territory	
3	Region of usual residence	All
	Standard labour force dissemination regions	
4	Sex	All
	Males	
	Females	
5	Marital status	All
	Married	
	Not married	
6	Relationship in household	All
	Family member	
	Husband, wife or partner	
	With dependants	
	Without dependants	
	Lone parent	
	With dependants	
	Without dependants	
	Dependent student	
	Non-dependent child	
	Other related individual	
	Non-family member	
	Lone person	
	Not living alone	
	Relationship not determined	
7A	Country of birth of person and Year of arrival in Australia	All
	Born in Australia	
	Born overseas	
	Arrived before 1971	
	Arrived 1971-1980	
	Arrived 1981-1990	
	Arrived 1991-2000	
	Arrived 2001 to survey date	
7B	Country of birth of person	All
	Born in Australia	
	Born overseas	
	Oceania and Antarctica	
	North-West Europe	
	Southern and Eastern Europe	
	North Africa and the Middle East	
	South-East Asia	
	North-East Asia	
	Southern and Central Asia	
	Americas	
	Sub-Saharan Africa	
7C	Country of birth of person (MESC)	All
	Born in Australia	
	Born overseas	
	Born in main English-speaking countries	
	Born in other than main English-speaking countries	
8	Age group (years)	All
	15-19	
	20-24	
	25-34	
	35-44	
	45-54	
	55-59	
	60-64	
	65-69	
	70 and over	
9A	Persons not in the labour force summary variable	1, 8, 10
	With marginal attachment to the labour force	
	Wanted to work and were actively looking for work	
	Were available to start work within four weeks	
	Were not available to start work within four weeks	

	Wanted to work but were not actively looking for work and were available to start work within four weeks	
	Discouraged job seekers	
	Other	
	Without marginal attachment to the labour force	
	Wanted to work but were not actively looking for work and were not available to start work within four weeks	
	Did not want to work	
	Permanently unable to work	
9B	Marginal attachment summary variable	3
	Wanted to work and were actively looking for work	
	Were available to start work within four weeks	
	Were not available to start work within four weeks	
	Wanted to work but were not actively looking for work and were available to start work within four weeks	
	Discouraged job seekers	
	Other	
10	Whether wanted to work	1, 8, 10
	Wanted to work	
	Might want to work	
	Did not want to work	
	Did not know	
11	Whether looked for work in the last 12 months	All
	Had looked for work	
	Less than 5 weeks ago	
	5 weeks and less than 8 weeks ago	
	8 weeks and less than 13 weeks ago	
	13-52 weeks ago	
	13 weeks and less than 26 weeks ago	
	26 weeks and less than 39 weeks ago	
	39-52 weeks ago	
	Had not looked for work	
12	Main activity when not in the labour force	All
	Retired or voluntarily inactive	
	Home duties or caring for children	
	Attending an educational institution	
	Own disability or handicap	
	Own illness or injury	
	Looking after ill or disabled person	
	Travel, holiday or leisure activity	
	Working in unpaid voluntary job	
	Other	
13A	Time since last job	All
	Had a job	
	Under 12 months	
	1 week and under 4 weeks	
	4 weeks and under 8 weeks	
	8 weeks and under 13 weeks	
	13 weeks and under 26 weeks	
	26 weeks and under 39 weeks	
	39 weeks and under 52 weeks	
	1 year and under 3 years	
	3 years and under 10 years	
	3 years and under 5 years	
	5 years and under 10 years	
	10 years or more	
	10 years and under 20 years	
	20 years or more	
	Never had a job	
13B	Whether had a job in the last 20 years	All
	Had a job	
	Last job less than 20 years ago	
	Last job 20 or more years ago	
	Never had a job	
14	Reason for ceasing last job	All
	Had a job	

	Job loser	Retrenched, dismissed Job was temporary or seasonal Own ill health or injury Business closed down for economic reasons	
	Job leaver	Unsatisfactory work arrangements Retired, did not work any longer Own disability or handicap Returned to studies Pregnancy or to have children To get married To look after family, house or someone else To have holidays, moved house or spouse transferred Business closed down for other than economic reasons Other	
	Never had a job		
15	Occupation in last job		All
	Last job less than 20 years ago		
	Managers		
	Professionals		
	Technicians and Trades Workers		
	Community and Personal Service Workers		
	Clerical and Administrative Workers		
	Sales Workers		
	Machinery Operators and Drivers		
	Labourers		
	Last job 20 or more years ago		
	Never had a job		
	Note: This data item is classified according to ANZSCO First Edition but occupation data are also available classified to ASCO Second Edition. For more information see paragraph 13 of the Explanatory Notes.		
16A	Status in employment in last job (1)		All
	Last job less than 20 years ago		
	Employer		
	Own account worker		
	Employee		
	Contributing family worker		
	Unpaid voluntary worker		
	Last job 20 or more years ago		
	Never had a job		
16B	Status in employment in last job (2)		All
	Last job less than 20 years ago		
	Employee		
	Own account worker/Employer		
	Other		
	Last job 20 or more years ago		
	Never had a job		
17	Full-time or part-time status in last job		All
	Last job less than 20 years ago		
	Full-time		
	Part-time		
	Varied/Did not know		
	Last job 20 or more years ago		
	Never had a job		
18A	Intention to enter the labour force		All
	Intended to enter the labour force		
	Might enter the labour force		
	Did not intend to enter the labour force		
	Did not know		
	Permanently unable to work		
	Not applicable (full-time student)		
18B	Intention to enter the labour force in the next 12 months		All
	Intended to enter the labour force in the next 12 months		
	Might enter the labour force in the next 12 months		
	Did not intend to enter the labour force in the next 12 months		

	Did not know	
	Permanently unable to work	
19	Full-time or part-time preference	2-7
	Full-time	
	Part-time	
	No preference	
	Undecided	
20	Main reason for not actively looking for work	4
	Wanted to work and were actively looking for work	
	Were available to start work within four weeks	
	Were not available to start work within four weeks	
	Wanted to work but were not actively looking for work and were available to start work within four weeks	
	Discouraged job seekers	
	Considered too young by employers	
	Considered too old by employers	
	Lacked the necessary schooling, training, skills or experience	
	Difficulties because of language or ethnic background	
	No jobs in locality or line of work	
	No jobs at all	
	Other reasons	
	Personal reasons	
	Own ill health, physical disability or pregnancy	
	Attending an educational institution	
	Had no need to work	
	Welfare payments or pension may be affected	
	Moved house or holidays	
	Family reasons	
	Ill health of other than self	
	Caring for children	
	No child care in locality	
	No child care available at all	
	Cost or too expensive	
	Booked out or no places available	
	Children too young or too old	
	Prefers to look after children	
	Quality of child care unsuitable	
	Other reasons	
	Other family considerations	
	No jobs in suitable hours	
	Other reasons	
	Had a job to go to	
	Did not know	
21	All reasons for not actively looking for work	4
	Discouraged job seekers	
	Considered too young by employers	
	Considered too old by employers	
	Lacked the necessary schooling, training, skills or experience	
	Difficulties because of language or ethnic background	
	No jobs in locality or line of work	
	No jobs at all	
	Other reasons	
	Personal reasons	
	Own ill health, physical disability or pregnancy	
	Attending an educational institution	
	Had no need to work	
	Welfare payments or pension may be affected	
	Moved house or holidays	
	Family reasons	
	Ill health of other than self	
	Caring for children	
	Other family considerations	
	No jobs in suitable hours	
	Other reasons	

	Had a job to go to	
	Did not know	
22	Main reason not working due to caring for children	7
	No child care in locality	
	No child care available at all	
	Cost or too expensive	
	Booked out or no places available	
	Children too young or too old	
	Prefers to look after children	
	Quality of child care unsuitable	
	Other child care reasons	
23	Reason not available to start work within four weeks	6
	Personal reasons	
	Own ill health, physical disability	
	Pregnancy	
	Studying or returning to studies	
	Moved house or holidays	
	Family reasons	
	Ill health of other than self	
	Unable to find suitable child care	
	Children too young or preferred to look after children	
	On a job-related training program	
	Other reasons	
24	Age of youngest child	7
	0-2 years	
	3-4 years	
	5 years	
	6-9 years	
	10-12 years	
25	Number of children	7
	Aged 0-2 years	
	Aged 3-4 years	
	Aged 5 years	
	Aged 6-9 years	
	Aged 10-12 years	

Supplementary surveys list (Appendix 2)

APPENDIX 2 SUPPLEMENTARY SURVEYS LIST

SUPPLEMENTARY SURVEYS

The Monthly Population Survey program collects data on particular aspects of the labour force. The following is an historical list of supplementary surveys to the monthly labour force survey. Data from these surveys are available on request and can be obtained by contacting the ABS.

	cat. no.	Frequency	Latest issue
Barriers and Incentives to Labour Force Participation, Australia	6239.0	Biennial	2004-2005
Career Experience, Australia	6254.0	Discontinued	Final issue 2002
Career Paths of Persons with Trade Qualifications, Australia	6243.0	Discontinued	Final issue 1993
Child Care, Australia	4402.0	Irregular	June 2005
Child Employment, Australia	6211.0	Irregular	June 2006
Education and Work, Australia	6227.0	Annual	May 2006

Employee Earnings, Benefits, and Trade Union Membership, Australia	6310.0	Annual	August 2006
Forms of Employment, Australia	6359.0	Irregular	November 2004
Job Search Experience, Australia	6222.0	Annual	July 2006
Labour Force Experience, Australia	6206.0	Biennial	February 2005
Labour Force Status and Educational Attainment, Australia	6235.0	Discontinued	Final issue 1994
Labour Force Status and Other Characteristics of Families, Australia(a)	6224.0	Discontinued	Final issue 2000
Labour Force Status and Other Characteristics of Migrants, Australia	6250.0	Irregular	November 2004
Labour Mobility, Australia	6209.0	Biennial	February 2006
Locations of Work, Australia	6275.0	Irregular	November 2005
Multiple Jobholding, Australia(b)	6216.0	Irregular	August 1997
Participation in Education, Australia	6272.0	Discontinued	Final issue 1999
Persons Not in the Labour Force, Australia	6220.0	Annual	September 2005
Persons Who had Re-entered the Labour Force, Australia	6264.0.40.001	Discontinued	Final issue 1995
Persons Who Have Left the Labour Force, Australia	6267.0.40.001	Discontinued	Final issue 1994
Retirement and Retirement Intentions, Australia	6238.0	Biennial	2004-2005
Retrenchment and Redundancy, Australia	6266.0	Discontinued	Final issue 2001
Successful and Unsuccessful Job Search Experience, Australia	6245.0	Discontinued	Final issue 2000
Superannuation, Australia	6319.0	Discontinued	Final issue 1995
Underemployed Workers, Australia	6265.0	Annual	September 2006
Working Arrangements, Australia	6342.0	Irregular	November 2003
Work-Related Injuries, Australia	6324.0	Irregular	2005-06

(a) Latest data available June 2006, from the ABS web site cat. no. 6224.0.55.001 annual, or on request.

(b) Latest data available on request July 2001.

I-Note (Data Cubes) - Data Cubes

This release corrects and expands on supporting information such as titles, footnotes, population labels and explanatory notes to aid users in the interpretation of data. The table 'Main reason not working due to caring for children' has been included as a separate data cube in this release (previously Table 4 in Data cube 3). The relative standard errors have been amended in a number of tables to reflect state/territory, rather than national level standard errors.

Data Quality (Technical Note)

TECHNICAL NOTE DATA QUALITY

INTRODUCTION

1 Since the estimates in this publication are based on information obtained from occupants of a sample of dwellings, they are subject to sampling variability. That is, they may differ from those estimates that would have been produced if all dwellings had been included in the survey. One measure of the likely difference is given by the standard error (SE), which indicates the extent to which an estimate might have varied by chance because only a sample of dwellings was included. There are about two chances in three (67%) that a sample estimate will differ by less than one SE from the number that would have been obtained if all dwellings had been included, and about 19 chances in 20 (95%) that the difference will be less than two SEs. Another measure of the likely difference is the relative standard error (RSE), which is obtained by expressing the SE as a percentage of the estimate.

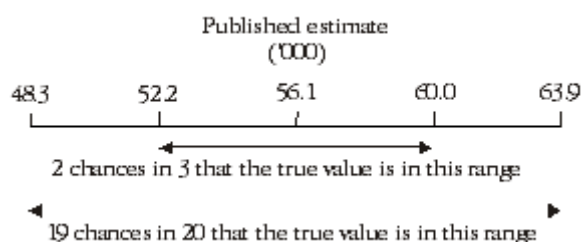
2 Due to space limitations, it is impractical to print the SE of each estimate in the publication. Instead, a table of SEs is provided to enable readers to determine the SE for an estimate from the size of that estimate (see table T1). The SE table is derived from a mathematical model, referred to as the 'SE model', which is created using data from a number of past Labour Force Surveys. It should be noted that the SE model only gives an approximate value for the SE for any particular estimate, since there is some minor variation between SEs for different estimates of the same size.

CALCULATION OF STANDARD ERRORS

3 An example of the calculation and the use of SEs in relation to estimates of people is as follows. Table 2 shows that the estimated number of people in Australia who were discouraged job seekers was 56,100. Since this estimate is between 50,000 and 100,000, table T1 shows the SE for Australia will be between 3,750 and 4,800, and can be approximated by interpolation using the following general formula:

$$\begin{aligned}
 &SE \text{ of estimate} \\
 &= \text{lower SE} + \left(\left(\frac{\text{size of estimate} - \text{lower estimate}}{\text{upper estimate} - \text{lower estimate}} \right) \times (\text{upper SE} - \text{lower SE}) \right) \\
 &= 3,750 + \left(\left(\frac{56,100 - 50,000}{100,000 - 50,000} \right) \times (4,800 - 3,750) \right) \\
 &= 3,900 \text{ (rounded to the nearest 100)}
 \end{aligned}$$

4 Therefore, there are about two chances in three that the value that would have been produced if all dwellings had been included in the survey will fall in the range 52,200 to 60,000, and about 19 chances in 20 that the value will fall within the range 48,300 to 63,900. This example is illustrated in the diagram below.



5 In general, the size of the SE increases as the size of the estimate increases. Conversely, the RSE decreases as the size of the estimate increases. Very small estimates are thus subject to such high RSEs that their value for most practical purposes is unreliable. In the tables in this publication, only estimates with RSEs of 25% or less are considered reliable for most purposes. Estimates with RSEs greater than 25% but less than or equal to 50% are preceded by an asterisk (e.g.*3.4) to indicate they are subject to high SEs and should be used with caution. Estimates with RSEs of greater than 50%, preceded by a double asterisk (e.g.**0.3), are considered too unreliable for general use and should only be used to aggregate with other estimates to provide derived estimates with RSEs of 25% or less.

PROPORTIONS AND PERCENTAGES

6 Proportions and percentages formed from the ratio of two estimates are also subject to sampling errors. The size of the error depends on the accuracy of both the numerator and the denominator. A formula to approximate the RSE of a proportion is given below. This formula is only valid when x is a subset of y.

$$RSE\left(\frac{x}{y}\right) = \sqrt{[RSE(x)]^2 - [RSE(y)]^2}$$

7 Considering the example above, of the 56,100 people in Australia who were discouraged job seekers, 20,400 or 36.4% were males. The SE of 20,400 may be calculated by interpolation as 2,600. To convert this to an RSE we express the SE as a percentage of the estimate, or 2,600/20,400 = 12.8%. The SE for 56,100 was calculated previously as 3,900, which converted to an RSE is 3,900/56,100 = 7.0%. Applying the above formula, the RSE of the proportion is

$$RSE = \sqrt{(12.8)^2 - (7.0)^2} = 10.7\%$$

8 Therefore, the SE for the proportion of discouraged job seekers who were male is 3.9 percentage points (= (36.4/100) × 10.7). Therefore, there are about two chances in three that the proportion of males who were discouraged job seekers is between 32.5% and 40.3% and 19 chances in 20 that the proportion is within the range 28.6% to 44.2%.

DIFFERENCES

9 Published estimates may also be used to calculate the difference between two survey estimates (of numbers or percentages). Such an estimate is subject to sampling error. The sampling error of the difference between two estimates depends on their SEs and the relationship (correlation) between them. An approximate SE of the difference between two estimates (x-y) may be calculated by the following formula:

$$SE(x-y) = \sqrt{[SE(x)]^2 + [SE(y)]^2}$$

10 While this formula will only be exact for differences between separate and uncorrelated characteristics or subpopulations, it is expected to provide a good approximation for all

differences likely to be of interest in this publication.

11 SEs contained in table T1 are applicable to all estimates from this survey.

STANDARD ERRORS

T1 STANDARD ERRORS OF ESTIMATES

Size of estimate (persons)	NSW no.	Vic. no.	Qld no.	SA no.	WA no.	Tas. no.	NT no.	ACT no.	Aust. SE no.	RSE %
100	120	170	160	100	120	100	120	90	120	120.0
200	210	260	240	170	190	150	160	140	200	100.0
300	280	330	300	220	240	190	200	180	260	86.7
500	400	430	400	300	330	240	250	230	370	74.0
700	500	520	480	360	400	280	290	270	450	64.3
1000	630	620	580	430	480	320	350	320	560	56.0
1500	800	750	710	530	590	380	430	370	710	47.3
2000	930	870	820	600	670	420	500	410	830	41.5
2500	1 050	950	900	650	750	450	550	450	950	38.0
3000	1 150	1 050	1 000	700	800	450	600	450	1 050	35.0
3500	1 250	1 100	1 050	750	850	500	700	500	1 150	32.9
4000	1 350	1 200	1 150	800	900	500	750	500	1 200	30.0
5000	1 500	1 300	1 250	850	1 000	550	850	550	1 350	27.0
7000	1 700	1 500	1 450	950	1 100	650	1 100	650	1 600	22.9
10000	2 000	1 750	1 650	1 150	1 250	850	1 450	800	1 900	19.0
15000	2 350	2 050	1 950	1 350	1 450	1 050	2 050	1 050	2 300	15.3
20000	2 600	2 250	2 150	1 550	1 650	1 300	2 600	1 250	2 600	13.0
30000	3 000	2 650	2 500	1 850	2 100	1 600	3 550	1 550	3 050	10.2
40000	3 350	2 900	2 800	2 150	2 550	1 850	4 400	1 750	3 450	8.6
50000	3 700	3 200	3 100	2 450	2 900	2 100	5 200	1 900	3 750	7.5
100000	5 150	4 650	4 700	3 550	4 300	2 950	8 400	2 350	4 800	4.8
150000	6 400	5 950	6 150	4 400	5 350	3 500	10 900	2 500	5 600	3.7
200000	7 550	7 050	7 300	5 050	6 150	3 900	..	..	6 350	3.2
300000	9 700	8 800	9 050	6 000	7 450	4 550	..	..	7 800	2.6
500000	13 250	11 500	11 300	7 150	9 300	5 350	..	..	10 550	2.1
1000000	18 800	16 000	14 000	8 450	12 150	..	..	..	16 600	1.7
2000000	24 450	21 600	15 650	9 300	15 250	..	..	..	24 250	1.2
5000000	30 400	30 450	15 550	..	..	..	..	..	35 250	0.7
10000000	32 450	37 950	..	..	..	..	..	..	42 450	0.4
15000000	..	..	..	..	..	..	..	..	45 550	0.3

.. not applicable

T2 LEVELS AT WHICH ESTIMATES HAVE RELATIVE STANDARD ERRORS OF 25% AND 50%(a)

	NSW no.	Vic. no.	Qld no.	SA no.	WA no.	Tas. no.	NT no.	ACT no.	Aust. no.
RSE of 25%	6 800	5 400	5 000	2 700	3 400	1 500	2 000	1 500	5 900
RSE of 50%	1 700	1 500	1 400	700	900	500	500	400	1 300

(a) Refers to the number of people contributing to the estimate.

© Commonwealth of Australia

All data and other material produced by the Australian Bureau of Statistics (ABS) constitutes Commonwealth copyright administered by the ABS. The ABS reserves the right to set out the terms and conditions for the use of such material. Unless otherwise noted, all material on this website – except the ABS logo, the Commonwealth Coat of Arms, and any material protected by a trade mark – is licensed under a Creative Commons Attribution 2.5 Australia licence